TDMS No. 95011 - 06 Test Type: CHRONIC

Route: GAVAGE

P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)

5-(HYDROXYMETHYL)-2-FURFURAL

**CAS Number:** 67-47-0

**Species/Strain:** MICE/B6C3F1 **Pathologist:** TOFT, J. - Blackshear, P.

F1\_M3

Date Report Reqsted: 11/10/2006 Time Report Reqsted: 09:06:29 First Dose M/F: 08/09/01 / 08/08/01

Lab: BAT

C Number: C95011B

**Lock Date:** 03/11/2004

Cage Range: ALL

Date Range: ALL

Reasons For Removal: 25021 TSAC 25020 NATD 25019 MSAC

25018 DACC

Removal Date Range: ALL

Treatment Groups: Include ALL

TDMS No. 95011 - 06 Test Type: CHRONIC Route: GAVAGE

Species/Strain: MICE/B6C3F1

5-(HYDROXYMETHYL)-2-FURFURAL CAS Number: 67-47-0

Pathologist: TOFT, J. - Blackshear, P.

Date Report Reqsted: 11/10/2006 Time Report Reqsted: 09:06:29 First Dose M/F: 08/09/01 / 08/08/01

B6C3F1 MICE MALE	0 MG/KG	188 MG/KG	375 MG/KG	750 MG/KG	
Disposition Summary					
Animals Initially in Study Early Deaths	50	50	50	50	
Dosing Accident	_	_		2	
Moribund Sacrifice	6	9	4	1	
Natural Death	4	6	3	31	
Survivors Natural Death				1	
Terminal Sacrifice	40	35	43	1 14	
Animals Examined Microscopically	50	50	50	49	
Animals Examined inforescopically	50	30	30	40	
LIMENTARY SYSTEM					
Gallbladder	(49)	(50)	(49)	(49)	
Infiltration Cellular, Mononuclear Cell	1 (2%)	1 (2%)	1 (2%)	1 (2%)	
Necrosis	(= 1-5)	1 (2%)	(= / -/ /	(=73)	
Intestine Large, Cecum	(50)	(50)	(50)	(49)	
Intestine Large, Colon	(50)	(50)	(50)	(49)	
Intestine Small, Duodenum	(50)	(50)	(50)	(49)	
Intestine Small, Ileum	(49)	(50)	(50)	(49)	
Inflammation, Chronic Active	, ,	1 (2%)	. ,	, ,	
Intestine Small, Jejunum	(50)	(50)	(50)	(49)	
Inflammation, Chronic Active		2 (4%)	1 (2%)		
Peyer's Patch, Hyperplasia, Lymphoid		2 (4%)			
Liver	(50)	(50)	(50)	(49)	
Basophilic Focus		4 (8%)	5 (10%)	1 (2%)	
Clear Cell Focus	26 (52%)	21 (42%)	26 (52%)	1 (2%)	
Cyst		1 (2%)			
Eosinophilic Focus	7 (14%)	9 (18%)	16 (32%)	8 (16%)	
Hematopoietic Cell Proliferation		2 (4%)			
Infarct	3 (6%)	2 (4%)	1 (2%)	1 (2%)	
Infiltration Cellular, Mononuclear Cell	6 (12%)	9 (18%)	6 (12%)	1 (2%)	
Inflammation, Granulomatous		1 (2%)			
Inflammation, Chronic Active	37 (74%)	30 (60%)	38 (76%)	19 (39%)	
Mineralization	1 (2%)		1 (2%)	2 (4%)	
Mixed Cell Focus	5 (10%)	11 (22%)	15 (30%)	3 (6%)	
Pigmentation		1 (2%)	1 (2%)	1 (2%)	
Thrombosis			1 (2%)		

a - Number of animals examined microscopically at site and number of animals with lesion

5-(HYDROXYMETHYL)-2-FURFURAL

**CAS Number:** 67-47-0

**Species/Strain:** MICE/B6C3F1 **Pathologist:** TOFT, J. - Blackshear, P.

TDMS No. 95011 - 06 Test Type: CHRONIC

Route: GAVAGE

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B6C3F1 MICE MALE	0 MG/KG	188 MG/KG	375 MG/KG	750 MG/KG	
Bile Duct, Hyperplasia			1 (2%)		
Hepatocyte, Necrosis	2 (4%)	4 (8%)	5 (10%)	1 (2%)	
Hepatocyte, Tension Lipidosis	1 (2%)	1 (070)	2 (4%)	1 (2%)	
Hepatocyte, Vacuolization Cytoplasmic	31 (62%)	28 (56%)	30 (60%)	10 (20%)	
Mesentery	(4)	(4)	(4)	(2)	
Pigmentation	(1)	( ' )	1 (25%)	(2)	
Artery, Inflammation, Chronic Active			1 (25%)		
Fat, Fibrosis	2 (50%)	2 (50%)	2 (50%)	2 (100%)	
Fat, Inflammation, Chronic Active	2 (50%)	3 (75%)	3 (75%)	2 (100%)	
Fat. Mineralization	2 (50%)	2 (50%)	3 (75%)	2 (100%)	
Fat, Necrosis	2 (50%)	2 (50%)	2 (50%)	2 (100%)	
Pancreas	(50%)	(50%)	(50%)	2 (100%) (49)	
			(50)	(49)	
Acinus, Atrophy	1 (2%)	2 (4%)			
Artery, Inflammation, Chronic Active	2 (4%)	1 (2%)	(50)	(40)	
Salivary Glands	(50)	(50)	(50)	(49)	
Atrophy			1 (2%)		
Mineralization	- (124)		1 (2%)		
Artery, Mineralization	2 (4%)	<b>/</b>	()	42	
Stomach, Forestomach	(50)	(50)	(50)	(49)	
Inflammation, Chronic Active	1 (2%)	5 (10%)	3 (6%)	2 (4%)	
Ulcer		1 (2%)	2 (4%)		
Epithelium, Hyperkeratosis		2 (4%)	2 (4%)	4 (8%)	
Epithelium, Hyperplasia	1 (2%)	4 (8%)	4 (8%)	4 (8%)	
Stomach, Glandular	(50)	(50)	(50)	(49)	
Dysplasia		1 (2%)			
Infiltration Cellular, Mast Cell			1 (2%)		
Inflammation, Chronic Active		1 (2%)	, ,		
Mineralization		1 (2%)	2 (4%)		
Tooth	(12)	(7)	(4)	(1)	
Inflammation, Chronic Active	( - /	1 (14%)	( ' /	( - /	
Malformation	10 (83%)	3 (43%)	2 (50%)	1 (100%)	
Gingiva, Inflammation, Chronic Active	2 (17%)	3 (1373)	2 (0070)	1 (10070)	
RDIOVASCULAR SYSTEM	2 ( 78)				
Blood Vessel	(3)	(1)	(0)	(1)	
Inflammation, Chronic Active	1 (33%)		• •		
Heart	(50)	(49)	(50)	(49)	
Cardiomyopathy	` '	` '	2 (4%)	2 (4%)	
Inflammation, Chronic Active	1 (2%)		= ( · · - /	_ ( ,	
Mineralization	1 (2%)	1 (2%)	1 (2%)	4 (8%)	

a - Number of animals examined microscopically at site and number of animals with lesion

5-(HYDROXYMETHYL)-2-FURFURAL

**CAS Number:** 67-47-0

Pathologist: TOFT, J. - Blackshear, P.

Date Report Reqsted: 11/10/2006 Time Report Regsted: 09:06:29 First Dose M/F: 08/09/01 / 08/08/01

Lab: BAT

(49)

B6C3F1 MICE MALE	0 MG/KG	188 MG/KG	375 MG/KG	750 MG/KG	
Thrombosis Artery, Inflammation, Chronic Active	1 (2%)	1 (2%)	1 (2%) 3 (6%)		
ENDOCRINE SYSTEM					
Adrenal Cortex	(49)	(50)	(50)	(49)	
Accessory Adrenal Cortical Nodule	4 (00()	2 (4%)	1 (2%)		
Degeneration, Fatty Hyperplasia	1 (2%)			1 (2%)	
Hypertrophy	13 (27%)	20 (40%)	13 (26%)	6 (12%)	
Subcapsular, Hyperplasia	45 (92%)	41 (82%)	46 (92%)	41 (84%)	
Zona Fasciculata, Hyperplasia	.5 (5270)	4 (8%)	1 (2%)	(5.70)	
Zona Glomerulosa, Hyperplasia		1 (2%)	. (= / = /		
Adrenal Medulla	(49)	(50)	(50)	(49)	
Islets, Pancreatic	(50)	(50)	(50)	(49)	
Hyperplasia	1 (2%)			·	
Parathyroid Gland	(41)	(48)	(48)	(37)	
Cyst		2 (4%)	45.	1 (3%)	
Pituitary Gland	(48)	(50)	(50)	(49)	
Pars Distalis, Cyst	6 (13%)	2 (4%)	3 (6%)	2 (4%)	
Pars Distalis, Hyperplasia	(50)	(50)	1 (2%)	(40)	
Thyroid Gland	(50)	(50)	(50)	(49)	
Inflammation, Chronic Active	1 (2%)	1 (2%)	1 (2%)	1 (2%)	
Follicle, Cyst	5 (10%) 9 (18%)	2 (4%)	1 (2%)	1 (2%) 5 (10%)	
Follicle, Degeneration Follicular Cell, Hyperplasia	9 (18%) 17 (34%)	13 (26%) 8 (16%)	9 (18%) 13 (26%)	5 (10%) 6 (12%)	
GENERAL BODY SYSTEM					
None					
None					
GENITAL SYSTEM					
Coagulating Gland	(0)	(2)	(2)	(0)	
Atrophy			1 (50%)		
		4 (=00()			

(50)

1 (2%)

2 (4%)

**TDMS No.** 95011 - 06

Test Type: CHRONIC

Species/Strain: MICE/B6C3F1

Route: GAVAGE

**Epididymis** 

Atrophy

Granuloma Sperm

Mineralization

Inflammation, Chronic Active

1 (50%)

(50)

1 (2%)

(50)

1 (2%)

a - Number of animals examined microscopically at site and number of animals with lesion

**TDMS No.** 95011 - 06 Test Type: CHRONIC

Route: GAVAGE

Species/Strain: MICE/B6C3F1

5-(HYDROXYMETHYL)-2-FURFURAL **CAS Number:** 67-47-0

Pathologist: TOFT, J. - Blackshear, P.

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Lab: BAT

B6C3F1 MICE MALE	0 MG/KG	188 MG/KG	375 MG/KG	750 MG/KG	
Preputial Gland	(50)	(50)	(50)	(49)	
Infiltration Cellular, Mononuclear Cell	,	,	1 (2%)	,	
Inflammation, Chronic Active	7 (14%)	3 (6%)	2 (4%)		
Bilateral, Duct, Ectasia	` ,	,	1 (2%)		
Duct, Ectasia	10 (20%)	7 (14%)	7 (14%)	7 (14%)	
Prostate	(50)	(50)	(50)	(49)	
Inflammation, Chronic Active	, ,	1 (2%)	,	, ,	
Artery, Inflammation, Chronic Active	1 (2%)	1 (2%)			
Seminal Vesicle	(50)	(50)	(50)	(49)	
Atrophy	,	,	1 (2%)	,	
Inflammation, Chronic Active	1 (2%)		( )		
Testes	(50)	(50)	(50)	(49)	
Atrophy	()	()	1 (2%)	( - )	
Mineralization	2 (4%)	2 (4%)	4 (8%)	1 (2%)	
Bilateral, Germinal Epithelium, Degeneration	_ ( . , . ,	_ ( . , . ,	1 (2%)	(= / - /	
Germinal Epithelium, Degeneration			1 (2%)	2 (4%)	
MATOPOIETIC SYSTEM	(50)	(50)	(50)	(40)	
Bone Marrow	(50)	(50)	(50)	(49)	
Myeloid Cell, Hyperplasia	(4)	1 (2%)	(4)	(0)	
Lymph Node	(4)	(3)	(4)	(0)	
Inguinal, Hyperplasia, Lymphoid	1 (25%)	4 (000()			
Mediastinal, Hyperplasia, Lymphoid	1 (25%)	1 (33%)			
Pancreatic, Hematopoietic Cell Proliferation	(40)	1 (33%)	(40)	(40)	
Lymph Node, Mandibular	(49)	(50)	(49)	(48)	
Hyperplasia, Lymphoid	6 (12%)	4 (8%)	7 (14%)	(40)	
Lymph Node, Mesenteric	(50)	(49)	(49)	(49)	
Hyperplasia, Lymphoid	2 (4%)	3 (6%)	5 (10%)		
Infiltration Cellular, Plasma Cell	(50)	(50)	1 (2%)	(40)	
	(50)	(50)	(50)	(49)	
Spleen Hemotopoietia Call Proliferation		16 (32%)	11 (22%)	2 (4%)	
Hematopoietic Cell Proliferation	11 (22%)		A (00/ \		
Hematopoietic Cell Proliferation Lymphoid Follicle, Hyperplasia		3 (6%)	4 (8%)	(40)	
Hematopoietic Cell Proliferation Lymphoid Follicle, Hyperplasia Thymus	(43)	3 (6%) (47)	(47)	(49)	
Hematopoietic Cell Proliferation Lymphoid Follicle, Hyperplasia Thymus Atrophy	(43) 18 (42%)	3 (6%) (47) 23 (49%)	(47) 16 (34%)	9 (18%)	
Hematopoietic Cell Proliferation Lymphoid Follicle, Hyperplasia Thymus	(43)	3 (6%) (47)	(47)	(49) 9 (18%) 23 (47%)	

**INTEGUMENTARY SYSTEM** 

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TDMS No. 95011 - 06 Test Type: CHRONIC

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5-(HYDROXYMETHYL)-2-FURFURAL

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B6C3F1 MICE MALE	0 MG/KG	188 MG/KG	375 MG/KG	750 MG/KG	
Skin Inflammation, Chronic Active Epidermis, Hyperkeratosis	(50) 2 (4%)	(50) 3 (6%) 1 (2%)	(50) 2 (4%)	(49)	
Epidermis, Hyperplasia Epidermis, Ulcer	2 (4%) 2 (4%)	2 (4%) 3 (6%)	1 (2%) 1 (2%)		
Subcutaneous Tissue, Inflammation, Chronic Active	2 (170)	1 (2%)	1 (270)	1 (2%)	
Subcutaneous Tissue, Mineralization Subcutaneous Tissue, Necrosis				1 (2%) 1 (2%)	
MUSCULOSKELETAL SYSTEM					
Skeletal Muscle	(1)	(4)	(1)	(1)	
NERVOUS SYSTEM					
Brain Degeneration	(50)	(50)	(50)	(49) 3 (6%)	
Artery, Inflammation Cerebrum, Hippocampus Neuron, Necrosis, Focal			1 (2%)	1 (2%)	
RESPIRATORY SYSTEM					
Lung Infiltration Cellular, Mononuclear Cell	(50) 1 (2%)	(50)	(50)	(49)	
Inflammation, Chronic Active Mineralization Pigmentation Thrombosis	4 (8%)	2 (4%) 1 (2%)	2 (4%) 1 (2%) 1 (2%)	1 (2%)	
Alveolar Epithelium, Hyperplasia Alveolus, Infiltration Cellular, Histiocyte Artery, Mediastinum, Inflammation, Chronic Active	3 (6%) 3 (6%)	1 (2%) 1 (2%) 1 (2%)	2 (4%) 2 (4%)	7 (14%)	
Glands, Inflammation, Chronic Active Nose	1 (2%) (50)	1 (2%) (50)	(50)	(47)	
Edema Inflammation, Chronic Active Polyp, Inflammatory	1 (2%)	2 (4%) 6 (12%) 1 (2%)	18 (36%)	45 (96%)	
Glands, Dilatation	16 (32%)	22 (44%)	47 (94%)	45 (96%)	

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5-(HYDROXYMETHYL)-2-FURFURAL

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Lab: BAT

B6C3F1 MICE MALE	0 MG/KG	188 MG/KG	375 MG/KG	750 MG/KG	
Glands, Hyperplasia	3 (6%)	7 (14%)	45 (90%)	45 (96%)	
Glands, Inflammation, Chronic Active	4 (8%)	12 (24%)	34 (68%)	43 (91%)	
Nasolacrimal Duct, Inflammation, Suppurative	2 (4%)	1 (2%)			
Olfactory Epithelium, Accumulation, Hyaline Droplet	13 (26%)	17 (34%)	29 (58%)	27 (57%)	
Olfactory Epithelium, Degeneration Olfactory Epithelium, Hyperplasia	4 (8%)	2 (4%)	17 (34%) 2 (4%)	39 (83%) 3 (6%)	
Olfactory Epithelium, Metaplasia	1 (2%)	7 (14%)	38 (76%)	43 (91%)	
Respiratory Epithelium, Accumulation, Hyaline Droplet	14 (28%)	17 (34%)	23 (46%)	31 (66%)	
PECIAL SENSES SYSTEM					
Eye	(50)	(50)	(50)	(49)	
Cornea, Inflammation, Chronic Active Harderian Gland	2 (4%) (50)	1 (2%) (50)	(50)	(48)	
Hyperplasia	4 (8%)	5 (10%)	1 (2%)	1 (2%)	
Inflammation, Chronic Active	(0,0)	(1075)	1 (2%)	(=)	
RINARY SYSTEM					
Kidney	(50)	(50)	(50)	(49)	
Hydronephrosis Infarct	1 (2%)	1 (2%)	3 (6%)	1 (2%)	
Metaplasia, Osseous	1 (2/0)	1 (2%)	3 (6%)		
Mineralization	43 (86%)	43 (86%)	44 (88%)	29 (59%)	
Nephropathy	49 (98%)	48 (96%)	46 (92%)	30 (61%)	
Artery, Inflammation, Chronic Active	3 (6%)	1 (2%)	3 (6%)		
Renal Tubule, Cyst	20 (40%)	12 (24%)	15 (30%)		
Renal Tubule, Dilatation	1 (2%)				
Renal Tubule, Hyperplasia			1 (2%)		
Renal Tubule, Pigmentation	4>	()	1 (2%)		
Urinary Bladder	(50)	(50)	(50)	(49)	
Mineralization			1 (2%)	1 (2%)	

\*\*\* END OF MALE \*\*\*

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B6C3F1 MICE FEMALE	0 MG/KG	188 MG/KG	375 MG/KG	750 MG/KG	
Disposition Summary					
Animals Initially in Study Early Deaths	50	50	50	50	
Moribund Sacrifice	4	5	8	6	
Natural Death	7	2	10	22	
Survivors					
Terminal Sacrifice	39	42	32	22	
Animals Examined Microscopically	50	49	50	50	
LIMENTARY SYSTEM					
Gallbladder	(50)	(48)	(49)	(48)	
Infiltration Cellular, Mononuclear Cell	3 (6%)	2 (4%)			
Intestine Large, Cecum	(50)	(49)	(50)	(50)	
Lymphoid Tissue, Hyperplasia	1 (2%)				
Intestine Large, Colon	(50)	(49)	(50)	(50)	
Artery, Inflammation, Chronic Active	1 (2%)		1 (2%)		
Intestine Large, Rectum	(50)	(49)	(50)	(50)	
Intestine Small, Duodenum	(50)	(49)	(50)	(50)	
Intestine Small, Ileum	(50)	(49)	(50)	(49)	
Intestine Small, Jejunum	(50)	(49)	(50)	(50)	
Peyer's Patch, Hyperplasia, Lymphoid	,	, ,	1 (2%)	,	
Liver	(50)	(49)	(50)	(50)	
Basophilic Focus	,	6 (12%)	5 (10%)	,	
Clear Cell Focus	1 (2%)	1 (2%)	• ,		
Eosinophilic Focus	6 (12%)	14 (29%)	6 (12%)	3 (6%)	
Hematopoietic Cell Proliferation	1 (2%)	2 (4%)	1 (2%)	• •	
Hemorrhage	. ,		1 (2%)		
Infiltration Cellular, Mononuclear Cell	32 (64%)	45 (92%)	34 (68%)	27 (54%)	
Inflammation, Granulomatous	1 (2%)				
Inflammation, Chronic Active	40 (80%)	45 (92%)	41 (82%)	36 (72%)	
Mineralization		1 (2%)	1 (2%)	. ,	
Mixed Cell Focus	4 (8%)	5 (10%)	6 (12%)		
Pigmentation		• •	1 (2%)		
Thrombosis			1 (2%)		
Bile Duct, Cyst			1 (2%)		
Hepatocyte, Necrosis	2 (4%)		3 (6%)	1 (2%)	
Hepatocyte, Tension Lipidosis	5 (10%)	4 (8%)	2 (4%)		

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**CAS Number:** 67-47-0

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B6C3F1 MICE FEMALE	0 MG/KG	188 MG/KG	375 MG/KG	750 MG/KG	
Hepatocyte, Vacuolization Cytoplasmic	34 (68%)	41 (84%)	34 (68%)	28 (56%)	
Mesentery	(12)	(7)	(6)	(1)	
Infiltration Cellular, Mononuclear Cell	1 (8%)				
Artery, Inflammation, Chronic Active				1 (100%)	
Fat, Fibrosis	9 (75%)	4 (57%)	3 (50%)		
Fat, Inflammation, Chronic Active	6 (50%)	5 (71%)	3 (50%)		
Fat, Metaplasia, Osseous		1 (14%)			
Fat, Mineralization	6 (50%)	3 (43%)	1 (17%)		
Fat, Necrosis	9 (75%)	4 (57%)	3 (50%)		
Pancreas	(49)	(49)	(50)	(50)	
Cyst				1 (2%)	
Inflammation, Chronic Active				1 (2%)	
Acinus, Atrophy		1 (2%)	2 (4%)		
Acinus, Hypertrophy	1 (2%)				
Salivary Glands	(49)	(49)	(49)	(43)	
Artery, Inflammation, Chronic Active		1 (2%)	1 (2%)	1 (2%)	
Stomach, Forestomach	(50)	(49)	(50)	(50)	
Inflammation, Chronic Active		2 (4%)			
Ulcer		1 (2%)			
Epithelium, Hyperkeratosis	2 (4%)	2 (4%)		1 (2%)	
Epithelium, Hyperplasia	2 (4%)	2 (4%)	2 (4%)	1 (2%)	
Stomach, Glandular	(50)	(49)	(50)	(50)	
Mineralization	3 (6%)	1 (2%)	1 (2%)	1 (2%)	
Tongue	(1)	(0)	(0)	(0)	
CARDIOVASCULAR SYSTEM					
Blood Vessel	(1)	(1)	(3)	(2)	
Aorta, Inflammation, Chronic Active				1 (50%)	
Heart	(50)	(49)	(50)	(50)	
Cardiomyopathy	1 (2%)		1 (2%)		
Mineralization		1 (2%)			
Thrombosis			1 (2%)		
Artery, Inflammation, Chronic Active		3 (6%)	2 (4%)	1 (2%)	
Valve, Inflammation, Suppurative	1 (2%)				
ENDOCRINE SYSTEM					
Adrenal Cortex	(50)	(49)	(50)	(49)	
Accessory Adrenal Cortical Nodule		2 (4%)	1 (2%)		

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5-(HYDROXYMETHYL)-2-FURFURAL

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Lab: BAT

B6C3F1 MICE FEMALE	0 MG/KG	188 MG/KG	375 MG/KG	750 MG/KG	
Homotopoietia Call Proliferation			4 (20/)		
Hematopoietic Cell Proliferation Mineralization			1 (2%) 1 (2%)		
Subcapsular, Hyperplasia	48 (96%)	49 (100%)	50 (100%)	49 (100%)	
Zona Fasciculata, Hyperplasia	40 (90%)	1 (2%)	2 (4%)	1 (2%)	
Adrenal Medulla	(50)	(49)	(50)	(49)	
Hyperplasia	(00)	(10)	1 (2%)	(10)	
Islets, Pancreatic	(50)	(49)	(50)	(50)	
Hyperplasia	2 (4%)	( - /	()	()	
Parathyroid Gland	(43)	(41)	(33)	(36)	
Cyst	2 (5%)	,	,	` ,	
Pituitary Gland	(49)	(49)	(47)	(44)	
Pars Distalis, Angiectasis	1 (2%)	, ,	, ,	1 (2%)	
Pars Distalis, Cyst		2 (4%)			
Pars Distalis, Hyperplasia	7 (14%)	11 (22%)	4 (9%)		
Thyroid Gland	(48)	(49)	(49)	(47)	
Ectopic Thymus		1 (2%)	1 (2%)		
Inflammation, Chronic Active	4 (8%)	7 (14%)	5 (10%)	2 (4%)	
Ultimobranchial Cyst			1 (2%)		
Follicle, Cyst	2 (4%)	2 (4%)		1 (2%)	
Follicle, Degeneration	10 (21%)	14 (29%)	15 (31%)	4 (9%)	
Follicular Cell, Hyperplasia	10 (21%)	12 (24%)	11 (22%)	3 (6%)	

### **GENERAL BODY SYSTEM**

TDMS No. 95011 - 06 Test Type: CHRONIC

Species/Strain: MICE/B6C3F1

Route: GAVAGE

None

GENITAL SYSTEM					
Clitoral Gland	(50)	(49)	(49)	(47)	
Inflammation, Chronic Active			1 (2%)		
Ovary	(50)	(48)	(49)	(48)	
Atrophy	12 (24%)	5 (10%)	14 (29%)	20 (42%)	
Cyst	9 (18%)	14 (29%)	19 (39%)	11 (23%)	
Hyperplasia, Adenomatous	,	,	1 (2%)	,	
Mineralization	2 (4%)	1 (2%)	, ,	1 (2%)	
Pigmentation	5 (Ì0%́)	3 (6%)		2 (4%)	
Bilateral, Cyst	2 (4%)	1 (2%)		,	
Oviduct	(2)	(1)	(2)	(0)	
Infiltration Cellular, Mononuclear Cell	1 (ŠÓ%)	. ,	,	,	
Uterus	(50)	(49)	(50)	(50)	

a - Number of animals examined microscopically at site and number of animals with lesion

TDMS No. 95011 - 06 Test Type: CHRONIC

Route: GAVAGE

**Species/Strain:** MICE/B6C3F1

5-(HYDROXYMETHYL)-2-FURFURAL

CAS Number: 67-47-0
Pathologist: TOFT, J. - Blackshear, P.

Date Report Reqsted: 11/10/2006 Time Report Reqsted: 09:06:29 First Dose M/F: 08/09/01 / 08/08/01

B6C3F1 MICE FEMALE	0 MG/KG	188 MG/KG	375 MG/KG	750 MG/KG	
Angiectasis Hemorrhage Inflammation, Chronic Active			1 (2%)	1 (2%)	
Thrombosis Endometrium, Hyperplasia, Cystic Lymphatic, Angiectasis	40 (80%)	43 (88%) 1 (2%)	1 (2%) 42 (84%)	1 (2%) 32 (64%)	
HEMATOPOIETIC SYSTEM					
Bone Marrow Lymph Node Mediastinal, Hyperplasia, Lymphoid Renal, Hematopoietic Cell Proliferation	(49) (10) 6 (60%) 1 (10%)	(49) (7) 1 (14%)	(50) (3)	(50) (3) 1 (33%)	
Lymph Node, Mandibular Hyperplasia, Lymphoid Infiltration Cellular, Mast Cell Pigmentation	(49) 3 (6%) 1 (2%)	(49) 9 (18%)	(46) 2 (4%) 1 (2%)	(43) 2 (5%)	
Lymph Node, Mesenteric Hemorrhage Hyperplasia, Lymphoid Inflammation, Chronic Active	6 (12%) 1 (2%)	(48) 1 (2%)	(49) 1 (2%)	(49)	
Artery, Inflammation, Chronic Active Spleen Hematopoietic Cell Proliferation Lymphoid Follicle, Hyperplasia Thymus Atrophy Cyst Ectopic Parathyroid Gland Hyperplasia, Lymphoid	(49) 9 (18%) 8 (16%) (47) 8 (17%) 32 (68%) 9 (19%)	1 (2%) (49) 6 (12%) (49) 3 (6%) 29 (59%) 10 (20%) 1 (2%)	(50) 5 (10%) 1 (2%) (50) 5 (10%) 25 (50%) 8 (16%) 3 (6%)	(50) 3 (6%) 2 (4%) (47) 2 (4%) 14 (30%) 2 (4%)	
INTEGUMENTARY SYSTEM					
Mammary Gland Hyperplasia, Cystic Skin	(50) (50)	(49) (49)	(50) 1 (2%) (50)	(46) (50)	
MUSCULOSKELETAL SYSTEM					
Bone	(49)	(49)	(50)	(50)	

a - Number of animals examined microscopically at site and number of animals with lesion

TDMS No. 95011 - 06 Test Type: CHRONIC

Route: GAVAGE

Species/Strain: MICE/B6C3F1

5-(HYDROXYMETHYL)-2-FURFURAL CAS Number: 67-47-0

Pathologist: TOFT, J. - Blackshear, P.

Date Report Reqsted: 11/10/2006 Time Report Reqsted: 09:06:29 First Dose M/F: 08/09/01 / 08/08/01

B6C3F1 MICE FEMALE	0 MG/KG	188 MG/KG	375 MG/KG	750 MG/KG	
Fibrous Osteodystrophy Skeletal Muscle Infiltration Cellular, Lymphoid Infiltration Cellular, Mononuclear Cell	3 (6%) (4) 1 (25%) 1 (25%)	3 (6%) (2)	1 (2%) (1)	4 (8%) (2)	
Inflammation, Chronic Active	1 (25%)			1 (50%)	
NERVOUS SYSTEM					
Brain Compression Degeneration Hemorrhage	(50)	(49) 1 (2%)	(50) 2 (4%) 1 (2%) 1 (2%)	(50)	
Hydrocephalus Artery, Inflammation, Chronic Active Cerebrum, Neuron, Necrosis	1 (2%)		1 (2%) 1 (2%)	1 (2%)	
Peripheral Nerve Sciatic, Demyelination	(1)	(0)	(1) 1 (100%)	(0)	
Spinal Cord Demyelination	(1)	(0)	(1) 1 (100%)	(0)	
RESPIRATORY SYSTEM					
Lung Infiltration Cellular, Mononuclear Cell	(50)	(49) 1 (2%)	(50)	(50)	
Inflammation, Chronic Active Mineralization Alveolar Epithelium, Hyperplasia	3 (6%) 2 (4%)	5 (10%)		2 (4%)	
Alveolus, Infiltration Cellular, Histiocyte Mediastinum, Infiltration Cellular, Mononuclear Cell	1 (2%)	3 (6%)			
Nose Inflammation, Chronic Active	(49)	(49) 1 (2%)	(50) 14 (28%)	(50) 41 (82%)	
Glands, Dilatation Glands, Hyperplasia	12 (24%)	36 (73%) 7 (14%)	48 (96%) 42 (84%)	47 (94%) 43 (86%)	
Glands, Inflammation, Chronic Active Nasolacrimal Duct, Inflammation, Suppurative	1 (2%)	6 (12%)	21 (42%) 2 (4%)	38 (76%) 3 (6%)	
Olfactory Epithelium, Accumulation, Hyaline Droplet	1 (2%)	1 (2%)	27 (54%)	25 (50%)	
Olfactory Epithelium, Degeneration	2 (4%)	1 (2%)	34 (68%)	24 (48%)	

a - Number of animals examined microscopically at site and number of animals with lesion

TDMS No. 95011 - 06 Test Type: CHRONIC

Route: GAVAGE

Species/Strain: MICE/B6C3F1

5-(HYDROXYMETHYL)-2-FURFURAL

**CAS Number:** 67-47-0

Pathologist: TOFT, J. - Blackshear, P.

Date Report Reqsted: 11/10/2006 Time Report Reqsted: 09:06:29 First Dose M/F: 08/09/01 / 08/08/01

B6C3F1 MICE FEMALE	0 MG/KG	188 MG/KG	375 MG/KG	750 MG/KG	
Olfactory Epithelium, Hyperplasia Olfactory Epithelium, Metaplasia Respiratory Epithelium, Accumulation, Hyaline Droplet	1 (2%) 4 (8%)	5 (10%) 4 (8%)	8 (16%) 30 (60%) 36 (72%)	24 (48%) 40 (80%) 27 (54%)	
SPECIAL SENSES SYSTEM					
Eye	(49)	(49)	(50)	(50)	
Atrophy Anterior Chamber, Inflammation,	1 (2%)		2 (4%)		
Suppurative	1 (270)				
Cornea, Hyperplasia	1 (2%)				
Cornea, Inflammation, Chronic Active Lens, Cataract	1 (2%)		1 (2%) 1 (2%)	1 (2%)	
Harderian Gland	(50)	(48)	(50)	(48)	
Hyperplasia Inflammation, Chronic Active	, ,	2 (4%) 1 (2%)	4 (8%)	2 (4%)	
URINARY SYSTEM					
Kidney	(50)	(49)	(50)	(50)	
Atypia Cellular Infarct		1 (2%) 4 (8%)	1 (2%)		
Infiltration Cellular, Mononuclear Cell		1 (070)		1 (2%)	
Metaplasia, Osseous	2 (4%)	2 (4%)	1 (2%)	0 (40()	
Mineralization Nephropathy	13 (26%) 32 (64%)	3 (6%) 42 (86%)	5 (10%) 33 (66%)	2 (4%) 26 (52%)	
Artery, Inflammation, Chronic Active	32 (04 /0)	1 (2%)	1 (2%)	20 (32 %)	
Renal Tubule, Cyst				1 (2%)	
Urinary Bladder	(50)	(49)	(49)	(50)	
Infiltration Cellular, Mononuclear Cell Artery, Inflammation, Chronic Active			1 (2%)	1 (2%)	
Artery, irinanimation, Chronic Active			I (∠70)		

<sup>\*\*\*</sup> END OF REPORT \*\*\*